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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

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WASTE MANAGEMENT DIVISION
OFFICE OF THE DIRECTOR

DATE: MAY 28 1987

SUBJECT: Clean Water Act-Related Language for the Johns-Manville Record of Decision (ROD)

FROM: Charles H. Sutfin
Director, Water Division

TO: Basil G. Constantelos
Director, Waste Management Division

Pursuant to a request by Brad Bradley, the Remedial Project Manager for the Johns-Manville site, Tim Henry of my staff has developed language for the subject ROD specific to the Clean Water Act. This language represents the Water Division position regarding water quality standards and criteria and discharge permitting requirements based on the available information.

Page 9 Clean Water Act ... Protection Strategy GWPS

Eliminate all references to the Clean Water Act in this Section (see attached mark-up) and insert a new section:

Clean Water Act (CWA)

In the site's present condition, there are no apparent point source discharges to waters of the United States (Lake Michigan). None of the alternatives will require a point source wastewater discharge, and alternatives II-V will include steps to eliminate any surface runoff.

Groundwater monitoring requirements will be established under Alternatives I-IV that are sufficient to define the concentration and flux to Lake Michigan of contaminants from the site. The groundwater remedial contingency plan to be established along with the groundwater monitoring requirements in the consent decree will include contaminant trigger levels to protect surface water quality in Lake Michigan or any other surface water receptor. These trigger levels will be established with the assistance of IEPA Division of Water Pollution Control and USEPA Water Division to ensure that applicable Illinois water quality standards (WQS) or USEPA ambient water quality criteria are not exceeded at any point in the surface waters.

If it becomes necessary to initiate any groundwater remedial actions or other remedial actions that involve an off-site surface water discharge, an NPDES permit will be obtained prior to any discharge. Any discharges to a publicly owned treatment works will comply with all applicable pretreatment requirements, as defined by the POTW, IEPA, and/or USEPA.

The above conditions will ensure compliance of the remedial actions (Alternatives II-V) with the wastewater discharge requirements of the CWA.

> Asbestos levels in Lake Michigan are, as a direct result of site contamination, currently exceeding USEPA ambient water quality criteria for the protection of human health at the 10^{-6} risk level for cancer. Based on IEPA's draft narrative toxics criteria, the Illinois water quality standards for general use and public water supply are being violated. In this respect, the site is not currently meeting the requirements of the CWA. Certain of the remedial actions (Alternatives II-V) may result in the lowering of asbestos levels in Lake Michigan and will be an important step toward achieving compliance with WQS for asbestos in the Lake.

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The first paragraph States that, "the provisions of the Clean Water Act ... are presently being met at the site ....". The data do not support this statement. The limited data for Lake Michigan that are contained in the RI indicate that asbestos levels exceed the ambient water quality criteria for the protection of human health at the 10^{-6} risk level for cancer by almost three orders of magnitude. These asbestos levels are also in violation of certain narrative sections of the IEPA water quality standards for general use and public water supplies.

Because of the present water quality standards violations that are a direct result of the asbestos contamination at the site, we believe that it is inappropriate to state that the site is currently in compliance with the Clean Water Act. We recommend that reference to the Clean Water Act be removed from the paragraph and a new paragraph inserted, reading:

> Asbestos levels in Lake Michigan are, as a direct result of site contamination, currently exceeding USEPA ambient water quality criteria for the protection of human health at the 10^{-6} risk level for cancer. Based on IEPA's draft narrative toxics criteria, the Illinois water quality standards for general use and public water supply are being violated. Therefore, the site is not meeting the provisions of the Clean Water Act. The activities undertaken as a part of the recommended alternative will not, by themselves, result in noncompliance with the Act and should help to alleviate the asbestos contamination in Lake Michigan.

Attachment

cc: B. Bradley, 5HE
P. Pranckevicius, 5GL
J. Garl, 5WG

provisions of SARA must be considered, including the Section 121 cleanup standards, which states a preference for permanent remedies. Alternatives III-V would provide long-term protection to public health and the environment from releases of asbestos to the air and direct contact with waste materials and soil. Due to the minimal thickness of cover involved in Alternative II and the fact that, in frost-susceptible areas, stones and other large particles, such as broken scraps of asbestos, tend to move differentially upward through the soil with each freeze/thaw cycle, Alternative II provides only short-term protection from releases of asbestos and direct contact with waste materials and soil. For this reason, Alternative II does not meet the objectives of SARA.

~~CLEAN WATER ACT (CWA),~~ SAFE DRINKING WATER ACT (SDWA) AND U.S. EPA GROUND WATER PROTECTION STRATEGY (GWPS)

In its present condition, the site complies with the standards and requirements of ~~the CWA and~~ the SDWA and the guidance of the GWPS. Based on RI results, levels of asbestos, lead and other contaminants were well within applicable drinking water standards. Even though all alternatives would, therefore, comply with the requirements of the ~~CWA,~~ SDWA, and the GWPS, any future levels of contaminants in ground water which would pose a threat to public health and the environment must be detected and effectively remediated. The detection monitoring system included in Alternatives I - IV would meet this goal; the responsibility of achieving this goal would rest with the chosen landfill operators in Alternative V.

It should be noted that the landfilling alternatives (IV and V) provide a greater degree of resistance to percolation and, therefore, a greater degree of ground water protection than the soil covering alternatives (II and III) and the no action alternative (I).

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

RCRA has specific requirements, 40 CFR Part 257, for siting and operating solid waste disposal facilities. All alternatives comply with all applicable requirements of RCRA. Again, it should be noted that, due to the use of impermeable liners, the landfilling alternatives (IV and V) offer a greater degree of ground water protection and are therefore preferable over the other alternatives from a RCRA standpoint.

OCCUPATIONAL SAFETY AND HEALTH ACT -(OSHA)

Regulations apply to the safety of workers during the implementation of the alternatives. All alternatives consider worker exposure to contaminants and are expected to comply with OSHA requirements. Due to the longer implementation times and the greater quantities of waste material to be handled, the landfilling alternatives (IV and V) would require a greater period of personal air monitoring and protection.

by the recommended alternative, which is further supplemented by a cover monitoring program that is designed to provide corrective action in the event that asbestos-containing wastes are detected near the cover surface, achieves the objectives of SARA. The detection monitoring system and associated contingency plan included in the recommended alternative will provide appropriate long-term protection to the groundwater at the site, as required by SARA. It should again be noted that, since no significant concentrations of contaminants were detected in the ground water during RI sampling and no receptors are located downgradient from the site, ground water contamination is not of primary concern at the site.

The provisions of the ~~Clean Water Act~~, Safe Drinking Water Act, U.S. EPA Ground Water Protection Strategy, and Resource Conservation and Recovery Act are presently being met at the site, and none of the activities undertaken as part of the recommended alternative will result in noncompliance with any of the above Acts or the GWPS. In fact, by providing a small degree of resistance to percolation, the recommended alternative provides a slightly greater degree of ground water protection than that presently existing at the site.

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The recommended alternative considers worker exposure to contaminants, and the work practices and personal protective equipment to be utilized during the implementation of the recommended alternative will comply with the applicable requirements of OSHA.

Since the recommended alternative complies with federal NESHAP requirements, it also complies with the State NESHAP regulations for asbestos. The recommended alternative also meets the intent of State of Illinois Environmental Protection Rules and Regulations, Part 807, Subpart C, Section 807.305, as stated in a letter from the State of Illinois which listed the State Applicable, Relevant, and Appropriate Requirements (ARARs) for the site. The State letter is included as Appendix II to this summary.

The discussion of cost-effectiveness for the remedial alternatives for the site must be broken down into two parts: 1) cost-effectiveness comparison of recommended alternative to other alternatives and 2) cost-effectiveness comparison of different cover thickness and soil profile scenarios.

The recommended alternative is the most cost-effective alternative because, with the possible exception of construction-generated dust and airborne contamination, it meets or exceeds all federal and State ARARs at a more reasonable cost than the other alternatives that provide a roughly equivalent level of protection to public